

AMENDMENTS TO THE CLAIMS

Please amend the claims as follows:

1. (Currently Amended) A computer implemented method for the estimation of component surplus in assemble-to-order manufacturing operations, the method comprising the steps of:

estimating an expected component surplus by

[[a]] identifying [[each]] a plurality of components required to produce a product;

b) defining a planned level for each component, the planned level defining the quantity at which the component is expected to be available;

[[c]] defining a vector of connect rates for the components;

[[d]] defining an uncancelable level for each of the components, each of the uncancelable levels defining [[the]] a quantity of the each of the components [[that]] below which the quantity of the each of the components cannot be liquidated without incurring a charge;

[[e]] assuming that a selected one of the components is available at least at [[its]] an uncancelable level of the uncancelable levels corresponding to the selected one of the components; and

f) assuming that all non-selected components are available at their respective planned levels;

g) estimating the mean production for the product; and

[[h]] computing the expected component surplus for the selected component using [[the]] a mean production for the product, the uncancelable level the selected component and the vector of connect rates.

2. (New) The computer implemented method of claim 1, the estimating further comprising:
 - defining a planned level for each of the components, each of the planned levels defining a quantity at which a corresponding one of the components is expected to be available.
3. (New) The computer implemented method of claim 2, the estimating further comprising:
 - assuming that each of the remaining ones of the components is available at the planned level corresponding to each of the remaining ones of the components, wherein the remaining ones of the components are ones of the components other than the selected one of the components.
4. (New) The computer implemented method of claim 3, the estimating further comprising:
 - using the planned levels in the computing the expected component surplus.
5. (New) The computer implemented method of claim 4, the estimating further comprising:
 - estimating the mean production for the product.
6. (New) An apparatus comprising:
 - means for estimating an expected component surplus comprising
 - means for identifying a plurality of components required to produce a product;
 - means for defining a vector of connect rates for the components;
 - means for defining an uncancelable level for each of the components, each of the uncancelable levels defining a quantity of the each of the components below which the quantity of the each of the components cannot be liquidated without incurring a charge;

means for assuming that a selected one of the components is available at least at an uncancelable level of the uncancelable levels corresponding to the selected one of the components; and means for computing the expected component surplus for the selected component using a mean production for the product, the uncancelable level and the vector of connect rates, the means for computing coupled to the means for defining the vector of connect rates and the means for assuming.

7. (New) The apparatus of claim 1, the means for estimating further comprising:

means for defining a planned level for each of the components, each of the planned levels defining a quantity at which a corresponding one of the components is expected to be available.

8. (New) The apparatus of claim 2, the means for estimating further comprising:

means for assuming that each of the remaining ones of the components is available at the planned level corresponding to each of the remaining ones of the components, wherein the remaining ones of the components are ones of the components other than the selected one of the components.

9. (New) The apparatus of claim 3, the means for estimating further comprising:

means for using the planned levels in the means for computing the expected component surplus, the means for computing coupled to the means for using the planned levels.

10. (New) The apparatus of claim 4, the means for estimating further comprising:

means for estimating the mean production for the product, the means for computing coupled to the means for estimating the mean production.

11. (New) A computer program product comprising:

a first set of instructions, executable on a computer system, configured to estimating an expected component surplus comprising:

a first subset of instructions, executable on a computer system, configured to identify a plurality of components required to produce a product;

a second subset of instructions, executable on said computer system, configured to define a vector of connect rates for the components;

a third subset of instructions, executable on said computer system, configured to define an uncancelable level for each of the components, each of the uncancelable levels defining a quantity of the each of the components below which the quantity of the each of the components cannot be liquidated without incurring a charge;

a fourth subset of instructions, executable on said computer system, configured to assume that a selected one of the components is available at least at an uncancelable level of the uncancelable levels corresponding to the selected one of the components;

a fifth subset of instructions, executable on said computer system, configured to compute the expected component surplus for the selected component using a mean production for the product, the uncancelable level and the vector of connect rates, the means for computing coupled to the means for defining the vector of connect rates and the means for assuming; and

computer readable media, wherein said computer program product is encoded in said computer readable media.

12. (New) The computer program product of claim 11, wherein said first set of instructions further comprises:

a sixth subset of instructions, executable on said computer system, configured to define a planned level for the each of the components, each of the planned levels defining a quantity at which a corresponding one of the components is expected to be available.

13. (New) The computer program product of claim 12, wherein said first set of instructions further comprises:

a seventh subset of instructions, executable on said computer system, configured to assume that each of the remaining ones of the components is available at the planned level corresponding to the each of the remaining ones of the components, wherein the remaining ones of the components are ones of the components other than the selected one of the components.

14. (New) The computer program product of claim 13, wherein said first set of instructions further comprises:

a eighth subset of instructions, executable on said computer system, configured to use the planned levels in the means for computing the expected component surplus, the means for computing coupled to the means for using the planned levels.

15. (New) The computer program product of claim 14, wherein said first set of instructions further comprises:

a ninth subset of instructions, executable on said computer system, configured to estimate the mean production for the product, the means for computing coupled to the means for estimating the mean production.